

Facilitating Successful Online Discussions

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Abstract

As online course offerings continue to evolve, researchers have examined many strategies for improving the online learning experience for both the instructor and the student. Asynchronous, online discussions are one of the most common components of online courses. This article provides information about the best practices for facilitating successful online discussions. The suggested best practices include several strategies for increasing student engagement through online discussions, grading and providing feedback for online discussions, and overcoming specific challenges in facilitating online course discussions. The application of these best practices will enable online educators to improve discussions in online courses.

Keywords: Online discussion, online learning, student engagement, providing feedback.

As online education has grown in the last two decades, so has the body of research surrounding best practices for instructors of online courses. Required online discussions are some of the most common assignments in any online course. Maddix (2012) states, “Effective online courses are highly dependent on the success of online discussion” (p. 382) and stresses that “effective online discussion can create a dynamic learning context that fosters learning, growth, and community among students and the teacher” (p. 373).

Not only are online discussions some of the most common assignments, but also they are one of the principle benefits of online education. Hall (2016) explains that face-to-face discussions are often controlled by few extroverted students, while asynchronous discussions allow all students, including introverted learners, enough time to think about questions and formulate responses before participating in discussion online. On the other hand, massive open online courses (MOOCs) are encountering converse results related to discussions. Hew and Cheung (2014) found that instructors of MOOCs report lack of student response in online discussions as a major challenge. Perhaps this is due to the fact that several hundred students could be enrolled in a particular MOOC at the same time, and a discussion thread with that many participants could quickly become overwhelming and impersonal. While discussion is an important component of any course regardless of how many students are enrolled or the setting, the challenges and benefits of discussion in each setting are unique and therefore traditional online courses are the focus of this article.

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In online courses, instructors have been trying new methods of structuring and delivering discussion questions to increase participation and student engagement for years. Chang, Chen, and Hsu (2011) emphasize that the most important role for an online course instructor is to ensure the participation of students online, because student participation promotes their active involvement in learning processes. Researchers have suggested many different ways of communicating with students in various online course discussions, and many of these ideas are examined in this article.

Increasing Student Engagement

Designing Discussion Questions

Since online courses began, instructors have looked for ways to increase student involvement and participation as they seek to replace the traditional face-to-face interactions experienced in classrooms with electronic interactions. Instructors generally structure courses around a textbook, and it is tempting to utilize the discussion questions that are printed in the textbooks when planning a course. Some researchers suggest that instructors remain open to taking the discussions in a more flexible direction that is led by students instead of publishers. Rao (2010) reported that students in online courses appreciated the instances in which course content was made relevant to their local scenarios. In this study, student engagement was increased by bringing local topics and current events into the discussions. Powell and Murray (2012) and Mills (2015) reported an increase in engagement when asking students to provide personal examples that helped to explain the course concept to others, and supported the idea that connecting course concepts to “real-life” makes learning more meaningful for students. Similarly, Paff (2015) suggested that instructors should enable students to select discussion topics or identify issues for exploration. This researcher found that discussion topics that were personal, timely, and relevant promoted more robust scholarly discourse. He also suggested that providing choice of discussion topics for students increased their sense of ownership for learning.

In addition to relevance, students value discussion questions that are interesting. Du and Xu (2010) found that a student’s level of interest in the discussion topic is a predictor of the quality of online discussion. The more interested a student is in a topic, the higher the quality of their discussion. Cheung, Hew, and Ng (2008) reported that the main reason students do not participate in an online discussion (87 percent of the time) is because they do not feel knowledgeable about the subject or topic. In the same study, 60 percent of the students said they chose to participate in a particular topic because it was interesting to them. This data suggests that instructors should be willing to ask students what they want to discuss, or even ask that students submit their ideas for discussion questions that align with course material.

Dennen (2005) reports that relevant, goal-based discussion topics will attract participation if both the relevance and learning objectives are made explicit to the students. This research implies that students will be more engaged in discussions in which the instructor has communicated the learning objectives prior to the beginning of the discussion. Stu-

dents want to know why they are required to participate in a discussion, and what type of knowledge they will gain from participating.

If participation and engagement seem low at the beginning of a course, an instructor could also apply concepts recommended by Schellens and Valcke (2005). These researchers found that students who did not have much knowledge on a topic coming in to the course were more engaged with discussion topics that built on each other throughout the course instead of jumping from topic to topic each week. They determined that if each discussion theme is built on a new body of knowledge, little transfer of knowledge from a former discussion could occur. Stephens (2015) suggested beginning each online course with a discussion that asks students a series of open-ended questions based on the course content, allowing the instructor to assess student readiness and content knowledge, and students to participate in an active learning activity and increase their sense of community.

The results of all of these studies imply that instructors should be willing to update the discussion questions as the course moves forward, rather than setting the discussion questions when the course begins. The research suggests that creating a flexible model for the incorporation of different types of discussion questions will allow instructors to utilize the method that will be most beneficial to their particular subject, course, or group of students (see Figure 1).

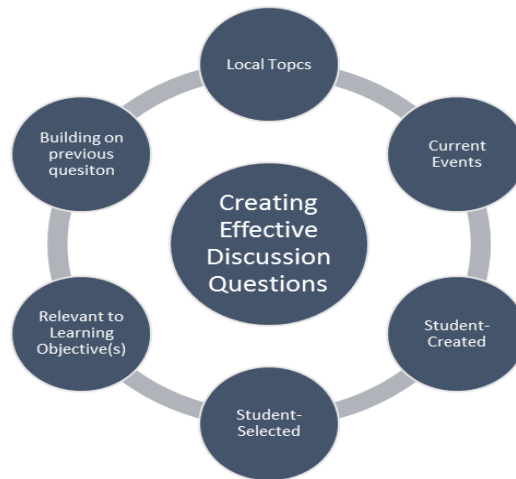


Figure 1. Considerations When Creating Discussion Questions.

Combatting Procrastination

Procrastination is the propensity to delay beginning or completing tasks (Lay, 1986), or to defer tasks to the point of distress (Solomon & Rothblum, 1984). Researchers suggest that students who procrastinate are often less academically successful in online discussions because they interact less with their classmates, regardless of the types of discussion questions used. Not only do they interact less than their non-procrastinating peers, but when they do interact, they are doing so later and thus missing out on course related dialogue. This tendency to interact late or not at all has a detrimental effect on academic performance (Michinov, et al., 2011).

In order to prevent or stop procrastination, several strategies have been suggested, including using motivational approaches (Tuckman, 2003), scaffolding (Elvers et al., 2003; Tuckman, 2005; Tuckman, 2007), establishing regular deadlines (Ariely & Wertenbroch, 2002), giving regular feedback (Doherty, 2006), utilizing authentic topics (Rovai, 2007; Worley, 2015), and centering discussion questions on a course project or paper (Rovai, 2007). Motivational strategies can be used at the beginning of the online course to encourage potential procrastinators to participate early and often. For instance, the instructor might provide students with feedback about performance as it relates to course grades. He/she might also ask students to compare their level of participation with that of their classmates (Michinov & Primois, 2005; Michinov et al., 2011). Finally, group work can be used to foster collaboration and responsibility among students, particularly when pairing students who do procrastinate with those who do not (Michinov et al., 2011).

Scaffolding (the modeling of the desired outcome by the teacher which is then gradually shifted to the student; Tuckman, 2005) can be used to coach procrastinators and provide them with additional learning assistance via guided discussions, time released course information with regular deadlines (Ariely & Wertenbroch, 2002), and consistently provided feedback (Doherty, 2006) in the form of guided synchronous and asynchronous discussion. As student motivation increases and procrastination decreases, instructors can gradually withdraw the additional assistance (Tuckman, 2007).

As discussed above, utilizing authentic discussion topics also may decrease procrastination among online learners due to the potential to increase intrinsic motivation. Authentic discussion topics have been shown to have meaning and relevance to students because students believe they are discussing something they need to succeed in the course and in life (Rovai, 2007; Worley, 2015). Instructors may consider utilizing current events, news stories, real-life case studies, etc. to develop authentic discussion topics that make a connection between course concepts and real practice. Another way to increase authenticity of discussions and decrease procrastination is to center discussion questions around a large project/paper that is authentic in nature (Rovai, 2007). Discussion questions can provide students with regular check points during the semester to ensure they are meeting time-related deadlines and understanding course concepts. As a result students will be required to work on large projects in smaller increments throughout the semester instead of waiting until the last minute.

Results of these studies emphasize the importance of combatting procrastination at the beginning of the course. Several approaches can be used to address procrastination including offering motivational techniques, establishing deadlines, providing prompt feedback, and centering discussion questions on interesting topics or large projects. If implemented appropriately, research indicates these approaches will keep students actively involved in discussions early and often, thus improving their academic success in the course.

Incorporating Reflective Assignments

In addition to combatting procrastination via online discussions, reflection through discussion can be used to increase student learning in online courses. Reflection is the ability to connect new information with personal meaning or past experiences (Gardner, 2001) and create new understanding based on that connection (Morley, 2008). Reflection typically occurs individually or between only the student and instructor, but research shows that reflection through online discussions can make for a more interactive, shared process, which may better facilitate knowledge acquisition. One study found that students who participated in online reflections via discussion reported higher levels of mastery of course objectives (Bye, Smith, & Rallis, 2009).

However, MacKnight (2000) suggests that students will not be able to engage in online reflection unless they have developed the skills and practiced them beforehand. Thus, it is essential for the instructor to facilitate the skill of reflection before the online discussion begins. One suggestion for doing this is to assign an offline reflective activity early in the term. In addition to this, instructors must support the online reflection process by focusing the discussions, asking probing questions and holding students accountable for their responses, and among others, periodically summarizing the discussion (MacKnight, 2000).

Types of discussion questions asked are also essential to facilitating reflection. Bloom's Taxonomy provides the instructor with six domains from which to develop discussion questions: knowledge, comprehension, application, analysis, synthesis, and evaluation. While the lower level domains (i.e. knowledge domain) elicit basic concepts with no requirement of reflection, the higher level domains require making judgments and reflecting on quality of information (Bloom, 1984). These thought provoking questions are essential to reflection, and instructors should consider developing thoughtful, higher level focus questions from which to center the discussion. King (1995) found that by asking higher level questions and providing feedback and guidance during the discussion, learning is boosted (see Table 1 for an example of a reflective question posed in an online discussion by one of the authors).

Finally, the format of the discussion can also be used to improve reflection in the online learning environment. MacKnight (2000) suggests the use of collaborative activities such as small group discussions, case study discussions with complex problems for analysis, and mock trials where students are provided a trial identity to carry out. One university faculty used a unique reflection approach by assigning students to write online letters to a critical friend that revealed lessons learned, connection of knowledge learned, and new knowledge created. These letters were posted and shared to the discussion forum throughout the term, and allowed for open communication about shared experiences, ideas, and implications for practice (Rocco, 2010). Another group of researchers asked students to self-reflect on the act of collaborating in group discussions (Xu, Du, & Fan, 2015).

Table 1. Sample Reflective Question and Student Response.

Sample reflection question:

“Reflect on what you have learned so far in class. Don't simply describe what you have learned, but reflect on it by explaining a personal meaning or a new understanding that has impacted your life in some way.”

Sample student response:

“...Whenever I used to think about cocaine users, I thought of addicts who just want to get high. I learned that cocaine is actually used in this day and age in nose and throat surgeries as an anesthetic. This is important for me to remember, because I always think of drugs as just: BAD. Like we learned earlier, drugs are neither good nor bad...”

This research suggests that instructors can foster the skill of reflection by developing higher level focus questions, guiding students in reflective practice at the beginning of the course, and utilizing a variety of discussion formats to illicit not only reflection but critical thinking and thoughtful interaction as well. If done properly, students will leave the course with a good grade and a mastery of course concepts.

Grading Discussions

Another way to improve the quality of online learning, and particularly online discussions, is to provide timely, meaningful feedback to students. Many times during online courses it can be easy to allow students to complete much work before providing them with any type of response informing them of their performance level. However, this may not be beneficial to students because they will not learn without constructive communication from the instructor. Feedback is essential to learning and improvement, especially in an online course where students do not get informal feedback during a class period. Several researchers have published advice for instructors on how to provide feedback in the most meaningful way.

During online discussions, MacKnight (2000) has found that providing daily feedback is essential. She recommends instructors post at least one message per day to suggest discussion posts are being read. However, she warns instructors not to post too soon or too often because it is essential to allow students time for reflecting on and responding to their peers' posts. Additionally, she suggests that when providing feedback it should be in the form of thought provoking questions that require students to critically think about the discussion topic.

In addition to providing thought provoking feedback to students, instructors might consider delivering accurate, but reassuring feedback to students to encourage them to continue to communicate rather than deterring them from communicating with criticizing

feedback (Rovai, 2007; Xie, 2013). Xie postulates that specific, encouraging feedback will help students develop reasonable efficacy beliefs.

Edwards (2005) agrees that positive feedback is essential in online discussions, but further develops this recommendation by providing a seven-step process for online instructors:

1. Start positive (e.g. this post was excellent);
2. Provide the grade with a rationale (e.g. this post scored an 80% because you followed 4 of the 5 discussion guidelines);
3. Provide a correction as a reminder or recommendation (e.g. remember, it is important to use APA formatting when citing references);
4. Provide an example or tip to make the correction (e.g. students find it helpful to use the formatting guide posted on the course page);
5. State the expectation (e.g. to raise your grade next week, try using the guide to reference your sources);
6. State you will help students (e.g. I am here to help you, so don't hesitate to email or call with questions); and
7. End with a motivational statement (e.g. only one discussion left – keep up the good work!).

Instructors may find it helpful to utilize a grading rubric to accompany their discussion feedback as well (see Figure 2 for a sample rubric utilized by one of the authors). Utilizing a grading rubric is an effective way to maintain consistency when grading while providing specific guidelines to students about the explicit criteria essential for each post. Vidmar (2004) suggests developing rubrics that require posts to be concise, limiting a comment to one or two points and explaining the logic of those points. He also recommends stressing punctuality, proper grammar, and quality of content in the rubric. Further, interaction is an essential discussion criterion, and should be added to the rubric (Heflin, n.d.; Kent, Laslo, & Rafaeli, 2016). To increase interaction, instructors might consider requiring two separate deadlines. The first mid week deadline includes the initial post responding to a question posed by the instructor, and the second deadline entails responding to at least two other students (Heflin, n.d.). Another approach to discussion forums is to assign a reading and have each student post an open-ended question about the reading for the first deadline. Then, the second deadline entails responding to each others' questions, and finally, a third deadline could be added asking students to end each response with another question in order to facilitate higher level thinking (Vidmar, 2004).

Grading rubrics also provide a means to allocate a course grade for discussions. For example, discussions counting for 10-20 percent of the total grade in a course have been found to be most effective at increasing communication, number of messages posted, and online classroom community (Rovai, 2007). Additionally, including a rubric item that requires 5-6 posts throughout the discussion period has been proven to influence meaningful discourse (Gilbert & Dabbagh, 2005). Meaningful discourse is the ability of learners to demonstrate critical thinking by relating content to prior knowledge and experienc-

es, interpreting content through analysis, synthesis, and evaluation, and making inferences (Jonassen et al, 1995; Gilbert & Dabbagh, 2005).

A final approach using grading rubrics is to increase student responsibility and self-awareness by providing examples of previous posts to students and asking them to distinguish between high quality and low quality posts based on grading rubric criteria (Vidmar, 2004). This approach allows students to perform an assessment of others' posts and then transfer that process into one of a self-grading experience (see Table 2).

This research concludes that it is essential to provide positive, immediate, and detailed feedback to facilitate learning. Additionally, grading rubrics can accompany feedback and add consistency and transparently posted expectations to an instructor's grading process while allowing students to more easily identify the criteria for quality discussions and thusly grade themselves.

	Unacceptable	Acceptable	Accomplished
Discussion Forum Initial Response	Makes little or no effort to analyze issues. Not completed, or late.	Uses somewhat developed ideas to analyze issues. Within documented time frame.	Makes significant effort to analyze issues with developed ideas. Within documented time frame.
Discussion Forum Responses to Classmates	Less than two postings; feedback lacked insight/ constructivism. Not completed, or late.	Two or more postings and created responses accordingly; feedback lacked insight/constructivism. Within documented time frame.	Two or more postings and created responses accordingly; provided constructive feedback to classmates, and raised opposing views. Within documented time frame.
Discussion Forum Final Response	Makes little or no effort to respond to classmates' questions/ comments. Not completed, or late.	Uses somewhat developed ideas to respond. Within documented time frame.	Makes significant effort to analyze issues and answer questions in response. Within documented time frame.

Figure 2. Sample Grading Rubric.

Table 2. Self-Grading Question and Sample Student Response.

Self-grading question:

“Please perform an analysis and self-assessment of the discussion posts from last week. Take two of the best posts you read (copy and paste them into the discussion thread – they can be your own) and explain why you think they are high quality based on the grading rubric for discussions (see the syllabus).”

Sample student response:

“...Based on the rubric, I believe that those are my best posts because I analyzed all the issues that were listed and I responded with feedback that would engage conversation. These two posts show that I thought thoroughly about the topic, I was knowledgeable of the information discussed, and I used sources to back up my arguments.”

Overcoming Challenges in Online Discussions

Large Class Sizes

Instructors have faced challenges with managing online discussions when they have a large number of students enrolled in a course. Naturally, reading through the posts, re-directing students, and grading the discussion posts will take more time with more students.

Kelly (2015) states that the “norm” for responding to students is 24 hours, and for grading work, seven days is the longest faculty should wait. These guidelines may seem unattainable for instructors, depending on their work loads. Students have their own set of negative perceptions about discussions in large online courses as well.

Lorenzetti (2010) conducted a study in which she found that larger class enrollments are negatively correlated with faculty participation in the online discussion, and therefore lead to lower student satisfaction with the discussion. The researcher recommends that 14 – 20 students in a discussion group is ideal. Similarly, Salmon (2003) asserts that good e-moderating always includes summarizing and feedback, which can be difficult to do with more than 20 active participants. She found that 8 – 12 students per course or learning group was ideal for the students to benefit from each other’s posting and for the instructor to be able to manage the discussion. Sullivan and Freishtat (2013) found that students preferred being split up into small groups of four to six when participating in online discussions, rather than to remain in one large group. They found this model to be less overwhelming and easier to conduct a meaningful conversation with their peers. Jones, Ravid, and Rafaeli (2004) also found that students were more likely to stop partic-

ipating in discussions with too many participants as the overloading of mass interaction increases.

Another alternative was explored by Baran and Correia (2009). These researchers allowed students to volunteer to be the facilitators for the discussions in their online course. The instructor modeled facilitation in the first few weeks of class, and provided each student facilitator with some guidelines for conducting their discussion. In these situations, the instructor contributed to the discussions as a participant rather than the facilitator. Different students used different techniques during their week to lead the discussion, but all were found to have produced high levels of participation with quality dialogue. “Findings in this study indicate that peer-facilitation strategies can help generate innovative ideas, motivate students to participate actively in the discussions, and provide an atmosphere for involvement and commitment” (p. 357). Rourke and Anderson (2002) conducted a similar study and also found that students valued the experience of leading discussions, and preferred peer facilitation to instructor facilitation.

The increasing popularity of Massive Open Online Courses (MOOCs) has afforded new ways for learners to consume information, often at no (or very low) cost. These online courses may seem daunting to faculty who are considering developing their own MOOC and offering it through a popular MOOC provider, based on the number of students expected to enroll in the course averaging around 43,000 (Ferenstein, 2014; Jordan, 2014). Since a course can only have a small number of instructors and teaching assistants assigned (compared to the volume of students), researchers suggest shifting the responsibility of leading discussions to students, or creating smaller localized groups of students, and allowing an instructor or content expert in the physical area of that learning community to lead the discussion (Jacobs, 2013; Kulkarni, Cambre, Kotturi, Bernstein, & Klemmer, 2015). Others suggest that instructors of MOOCs simply set the expectation that they will only answer the most popular questions posed by students in the discussion forums (Suen, 2014). This could be determined by reading through all posts in the discussion, or by utilizing an up-voting and down-voting system designed to allow students to vote on posts they found to be most (or least) interesting or relevant.

Small Class Sizes

Challenges are also present for students and instructors when an online class has low enrollment. Hew and Cheung (2011) found a significant positive correlation between group size and the frequency of higher level knowledge construction occurrences in online discussions. This suggests that more high-level knowledge construction tends to occur in larger discussion groups. Since instructors generally cannot control the number of students who enroll in their courses, it is important to become familiar with different strategies to manage discussions in both large and small online classes.

Land, Choi, and Ge (2007) found that in small courses, delayed postings became an obstacle for students to meet the required number of postings and maximize learning stemming from observing their classmates’ opinions, ideas, and experiences. They report “it is important to apply a variety of procedural requirements to facilitate students to partici-

pate in discussions in a meaningful and timely manner” (p.414). In these situations, the researchers found that having students follow very structured timeframes for postings was essential for success. As mentioned previously, instructors could create rubrics that require the students to create their initial post during the first half of the week or module, so that everyone will have posts to read and respond to.

Alternatively, Du, Havard, and Li (2005) propose that faculty employ a model for online discussions in which “continuous peer review of posted responses to items challenges each student to provide their best input to the learning community created through dynamic discussion” (p.216). In this model, students are required to choose one (of two) discussion question, and post their response to the question. Additionally, students must also critique one other student’s response. This highly structured model pushes students to become more engaged in the discussions. These researchers also noted that when students are given discussion questions that relate to a course project, engagement is increased.

Peer-led discussions are another alternative for combatting the lack of discussion participation in small courses. Cheung et al. (2008) found that in peer-led discussions, eighty percent of the students feel more motivated when the forum owner acknowledges their posting. This causes them to want to post even more in the thread. The same study found that many students feel discouraged after they find that others have already posted similar ideas to what they wanted to post. In these cases, it could be helpful for instructors to employ a feature of the course management system in which the students cannot see each other’s posts before they answer the initial discussion question. Park, et al. (2015) also supported this practice when they found that levels of participation in online discussions remained stable when led by students rather than instructors.

This research concludes that instructors should pay special attention to class size as they plan their online discussions. Different techniques designed to maintain the value of participation or increase the level of student engagement may be helpful when a class is especially small or large. Applying these techniques requires instructors to be flexible with discussion techniques based on course enrollments.

Inexperienced Online Learners

A final challenge for instructors and students regarding online discussions is a general unfamiliarity with online courses. Tyler-Smith (2006) found that many students who are new to online learning drop out in their first semester due to various challenges that combine to make the student feel so uncomfortable that they cannot move forward. Some of these challenges include negotiating the required technology and course management system, negotiating the course content, and interacting with peers via asynchronous discussions. He suggests that instructors simply tell learners about the common struggles that new online learners face at the beginning of a program to make them feel more at ease. In addition, he suggests that instructors directly contact students who seem uncomfortable with the technology and/or course participation, or those who do not post to the discussion board during the first course module, to provide direct support and encouragement.

Similarly, Carr (2014) asserted that instructors should never assume that students in online courses are familiar with the technology used to deliver course materials, and should make an effort to contact students via email before the course begins to offer instructions for accessing the course and any other helpful resources that the student may need when getting started.

St. Clair (2015) and Brinthaupt, Fisher, Gardner, Raffo and Woodard (2011) suggest that instructors start each online course with a “check-in quiz”, designed to introduce students to the online course format in a simple, low-pressure way. Students are asked to find each element in the course that will be important for their learning (content, discussion requirements, due dates, grading procedures, assignment submission requirements, etc.), and students will naturally become more familiar with these elements as they complete the quiz. The quiz should be set up in the same format as an exam for the course. These quizzes can help relieve some of the anxiety that first-time online students often feel when entering the course, which may lead to higher grades and rates of success. This could be especially useful when requirements for participation in an online course discussion vary from instructor to instructor.

Salmon (2003) notes that a certain amount of “lurking” or reading others’ comments without participating should be allowed at the beginning of a course for new learners. She reports that online students will start to participate only when they feel ‘at home’ in the online culture and with the technology that is being used. She also suggests that instructors in online courses should try to connect students who have the same interests, to encourage a sense of community and belonging. It is important to note that these actions can only be completed if instructors are willing to read the comments from their students and then act on the information in those comments.

Students who are new to online learning may also benefit from bringing the offline world into the online course. Bull (2014) suggests adding an element to online courses in which students are required to conduct an activity, and then discuss the results. Suggestions for these activities include face-to-face interviews with professionals in a relevant industry, observations of actions in the natural world or a professional environment, service learning activities, and capturing and sharing relevant photo and video footage from their area. These suggested activities would be ideal for new online learners, as they could bridge the gap between hands-on, traditional learning and e-learning.

This body of research suggests that instructors should actively seek out students who are new to the online environment in the beginning of each term. This task may seem overwhelming, especially for instructors with large courses, but thoughtful planning combined with some of the techniques mentioned could reduce the time instructors spend assisting students with navigating the course delivery system or familiarizing themselves with online course structures.

Conclusions

There are many strategies educators can use to increase student engagement in online discussions. The results of the studies analyzed imply that instructors should be willing to create a flexible model for the incorporation of different types of discussion questions, rather than relying on pre-printed discussion questions listed in the textbook (Cheung, et al., 2008; Dennen, 2005; Du & Xu, 2010; Paff, 2015; Rao, 2010; Schellens & Valcke, 2005). Several approaches can be used to address procrastination including offering motivational techniques (Tuckman, 2003), scaffolding (Elvers et al., 2003; Tuckman, 2005; Tuckman, 2007) establishing deadlines (Ariely & Wertenbroch, 2002), providing prompt feedback (Doherty, 2006), and centering discussion questions on interesting topics or large projects (Rovai, 2007). Research also suggests that instructors can foster the skill of reflection by developing higher level focus questions (King, 1995), guiding students in reflective practice at the beginning of the course (MacKnight, 2000), and utilizing a variety of discussion formats to illicit not only reflection but critical thinking and thoughtful interaction as well (Rocco, 2010).

Instructors can also improve online discussions by providing positive, immediate, and detailed feedback to facilitate learning (MacKnight, 2000; Rovai, 2007; Xie, 2013). Additionally, grading rubrics can accompany feedback and add consistency and transparently posted expectations to an instructor's grading process while allowing students to more easily identify the criteria for quality discussions and thusly grade themselves (Gilbert & Dabbagh, 2005; Rovai, 2007; Vidmar, 2004).

Researchers have found that instructors should pay special attention to class size as they plan their online discussions. Discussion facilitators may benefit from creating smaller groups of students to facilitate more manageable discussion threads (Jones, et al., 2004; Sullivan & Freishtat, 2013), assigning students as facilitators or peer-reviewers (Baran & Correia, 2009; Cheung, et al., 2008; Du, et al., 2005; Rourke & Anderson, 2002), and/or adjusting the timeframe for participation (Land, et al., 2007). Researchers also suggest that instructors should actively seek out students who are new to the online environment in the beginning of each term (Tyler-Smith, 2006), provide a course check-in quiz (Brinthaupt, et al., 2011; St. Clair, 2015), and allow special accommodations for new online learners (Bull, 2014; Salmon, 2003).

Online education continues to grow, and these evidence-based best practices grounded in five central ideas (designing discussion questions; combatting procrastination; incorporating reflective assignments; utilizing appropriate grading procedures; and overcoming challenges in large classes, small classes, and with inexperienced learners) can assist faculty as they prepare to facilitate successful discussions in online courses.

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